

ABSTRACT

[0041] A new and improved high pressure post valve used to control the flow of high pressure gas, e.g., oxygen, from a high pressure gas cylinder. More particularly, the improvements are directed to three different inventive embodiments: (1) manufacturing the post valve from cylindrical metal bar stock to contain a unitary valve body having an integral valve body seat ring for seating against gas cylinder structure, thereby preventing gas leakage between the valve body and the valve body seat ring; (2) providing the post valve with a valve actuator having an annular valve seat, surrounding a valve cavity, and disposing a deformable valve seat material in position to surround a gas inlet orifice for sealing contact with the annular actuator valve seat for sealing in an area surrounding the gas inlet orifice to prevent direct contact of high pressure inlet gas against the valve seat material; and (3) disposing of filter within a gas inlet orifice of the post valve to remove any solids entrained in the high pressure gas to prevent solids from contacting the valve actuator.